High-Impact Practices

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During the 2019 administration of the Faculty Survey of Student Engagement (FSSE), new questions related to high impact practices were administered to faculty. Questions explored if faculty had or would participate in supervising, mentoring, or teaching undergraduate students in learning communities; if faculty supervised undergraduate students partaking in study abroad; and, if faculty had mentored or taught undergraduates completing a culminating senior experience (capstone, thesis, etc.). Faculty were also asked how important it was to them that an undergraduate student partake in these opportunities. This document outlines broad findings of the new high impact practice items as well as the items that can be found on the core survey.

Data Description

The data in this brief come from faculty respondents at 25 four-year colleges and universities that administered the Faculty Survey of Student Engagement (FSSE) in 2019 and opted-in to an experimental item set that was appended to the end of their FSSE administration. There were 1,369 faculty at these institutions that responded to the items in the set. FSSE collects information annually at hundreds of four-year colleges and universities from faculty who teach at least one undergraduate course in the current academic year. The results provide information about faculty expectations for student engagement in educational practices that are empirically linked with student learning and development. Institutions use their data to identify aspects of the undergraduate experience that can be improved through changes in policy and practice. For more information, visit the FSSE website: **fsse.indiana.edu**.

Item Information

There are 13 items related to high-impact practices across four question stems. Information on these items can be found in Tables 1 and 2. Table 1 contains counts, means, and standard deviations; it additionally contains factor loadings for the items that fit within a single scale. Table 2 contains frequency percentages for all of the items' response options.

With the highest average response of "very important" or "important," faculty most substantially emphasize students partaking in internships followed by capstone projects. Faculty least substantially emphasize students holding leadership roles in student organizations with studying abroad being second least. During the school year, faculty plan to or have participated in facilitating capstone experiences the most followed by supervising undergraduate research while in a typical 7-day week, faculty report more frequently partaking in undergraduate research experiences than supervising internships. In regard to the number of service learning courses faculty teach at their institution faculty would say "some" in comparison to most or all of their classes.

Table 3 contains significant correlations between the individual high-impact practice items. Most of the relationships are weak with the strongest being between leadership and learning communities ($r = .422$, $p < .01$).

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Scale Information

Given a number of the items asking faculty about high-impact practices are dichotomous thus have limited variance, there was only one scale that was created from stem one. *HIP1* represents the items combined based on how important it is to faculty that students partake in these applied educational opportunities. To create the scale, the response choices were recoded to represent 0 to 60: Very much=4 is recoded to 60, Important=3 recoded to 40, Somewhat important=2 recoded to 20, and Not important=1 recoded to 0. Faculty responses are averaged to create a scale score; information about the scale can be found in Table 4. The Cronbach Alpha coefficient demonstrates a measure of internal consistency of the items ($\alpha = .743$). The intraclass correlation coefficient (ICC) suggests that 6% of the variation in the scale is at the institution level. If interested in institution-level effects, multi-level modeling may be preferable. All factor loadings are high suggesting all items fit well within the construct (Table 1).

Correlations

Table 5 presents correlations between the HIP scale and the core survey FSSE Scales. Faculty who emphasized participation in high-impact practices also believed it was important for their institution to increase the support it provides their students. Faculty who found value in students partaking in high-impact practices also emphasized reflective and integrative learning in their coursework.

Disciplinary Differences

The amount faculty who find high-impact practices to be important (*HIP1*) varies across disciplines (Figure 1). On average, faculty from Physical Sciences, Mathematics, and Computer Science find these experiences to be less important than their colleagues in the Social Service Profession fields. Although, it should be noted there is quite a bit of variation in these fields when looking at quartiles. The interquartile ranges of faculty from Engineering, Health Professions, and Education disciplines appear to be smaller than their peers, demonstrating these three groups more consistently find importance in high-impact practices. This may be because these disciplines often have capstone experiences or internship/field placements embedded in their curricula. On the contrary, Physical Sciences, Mathematics, and Computer Sciences; Communication, Media, and Public Relations; and Social Service Professions have larger interquartile ranges demonstrating there is more variety in faculty who place importance on high-impact practices.

Our Related Papers

For more information about FSSE and high impact practices see the following publications, conference papers and presentations, research reports or other investigations focused on HIPs:

- BrckaLorenz, A., Garvey, J. C., Hurtado, S. S., & Latopolski, K. (2017). High-impact practices and student-faculty interactions for gender-variant students. *Journal of Diversity in Higher Education, 10*(4), 350-365.

- Faculty Survey of Student Engagement (FSSE). (2008). *Promoting engagement for all students: The imperative to look within*. http://nsse.indiana.edu/NSSE_2008_Results/docs/withhold/2008_Annual_Results.pdf#page=21
- Garvey, J. C., BrckaLorenz, A., Latopolski, K., Hurtado, S. S. (2018). High-impact practices and student-faculty interactions across sexual orientations. *Journal of College Student Development, 59*(2), 210-226.
- Nelson Laird, T., BrckaLorenz, A., Zilvinskis, J., & Lambert, A. (2014). Exploring the effects of a HIP culture on campus: Measuring the relationship between the importance faculty place on high-impact practices and student participation in those practices. Session at the Association for the Study of Higher Education Annual Conference, Washington, DC.

Predictors

Tables 6 and 7 present predictors where faculty place a lesser or higher emphasis on students' participation in a high-impact practice based on demographics, employment, and institutional characteristics. The emphasis of high-impact practices appears to be most related to disciplinary areas or the faculty's race/ethnicity although significant differences do appear among other variables. Select findings include, faculty in the Physical Sciences, Math, and Computer Sciences place less emphasis on high-impact practices while their colleagues in Education and the Health Professions emphasize them more in comparison to the average response of faculty. Additionally, faculty who identify as White place less emphasis on high-impact practices while their Middle Eastern or North African counterparts place more emphasis in comparison to the average response. Note: Estimates for Native Hawaiian or Other Pacific Islander were not possible due to the small sample size.

Figures 2-6 show the average HIP1 scale scores by some faculty demographics and institutional characteristics. Faculty who were not US citizens placed more emphasis on high-impact practices than their colleagues. It seems faculty across the tenure spectrum placed about equal emphasis on high-impact practices. Regarding institutional type, there did not appear to be many differences across Carnegie Classification except small master's granting institutions placed an emphasis on high-impact practices nearly 10 points higher than any other institution type.

High-Impact Practices

Table 1. High Impact Practice Item Descriptives

During the current school year, have you or will you participate in the following activities?
Response options: *1=Yes, 0= No*

	Count	Mean	Std. Dev.
Supervise, mentor, or teach undergraduates in a learning community or some other formal program where groups of students take two or more classes (*fHBW1901a*)	1,354	.64	.480
Supervise undergraduates in a study abroad program *(fHBW1901b)*	1,351	.15	.360
Mentor or teach undergraduates completing a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) *(fHBW1901c)*	1,360	.69	.461

How important is it to you that undergraduates at your institution do the following before they graduate?
Response options: 4=*Very important*, 3=*Important*, 2=*Somewhat important*, 1=*Not important*

	Count	Mean	Std. Dev.	Factor Loading (*HIP1*)
Participate in an internship, co-op, field experience, student teaching, or clinical placement (*fintern*)	1,363	3.51	.734	.625
Hold a formal leadership role in a student organization or group *(fleader)*	1,365	2.43	.833	.699
Participate in a learning community or some other formal program where groups of students take two or more classes together *(flearncom)*	1,364	2.65	.929	.674
Participate in a study abroad program *(fabroad)*	1,363	2.45	.987	.572
Work with a faculty member on a research project *(fresearch)*	1,365	2.79	.918	.579
Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) *(fcapstone)*	1,365	3.47	.743	.540
Participate in a community-based project (service-learning) as part of a course *(fservice)*	1,365	2.92	.896	.699

In a typical 7-day week, do you participate in the following activities?
Response options: 1=Yes, 2= No

	Count	Mean	Std. Dev.
Working with undergraduates on research *(fdresearch)*	1,360	.50	.500
Supervising undergraduate internships or other field experiences *(fdintern)*	1,353	.45	.497

About how many of your undergraduate courses at this institution have included a community-based project (service-learning)? *(fservcourse)*
Response options: 4=All, 3=Most, 2=Some, 1=None

	Count	Mean	Std. Dev.
	1,284	11.81	.822

High-Impact Practices

Table 2. High Impact Practice Item Frequencies

During the current school year, have you or will you participate in the following activities?
Response options: 1=Yes, 0=No

	Yes (%)	No (%)
Supervise, mentor, or teach undergraduates in a learning community or some other formal program where groups of students take two or more classes (*fHBW1901a*)	64.0	36.0
Supervise undergraduates in a study abroad program *(fHBW1901b)*	15.3	15.3
Mentor or teach undergraduates completing a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) *(fHBW1901c)*	69.3	30.7

How important is it to you that undergraduates at your institution do the following before they graduate?
Response options: 4=*Very important*, 3=*Important*, 2=*Somewhat important*, 1=*Not important*

	Very Important (%)	Important (%)	Somewhat Important (%)	Not important (%)
Participate in an internship, co-op, field experience, student teaching, or clinical placement (*fintern*)	63.6	24.7	10.3	1.4
Hold a formal leadership role in a student organization or group *(fleader)*	9.8	35.7	41.9	12.6
Participate in a learning community or some other formal program where groups of students take two or more classes together *(flearncom)*	19.9	37.5	30.6	12.0
Participate in a study abroad program *(fabroad)*	17.5	29.1	34.6	18.7
Work with a faculty member on a research project *(fresearch)*	25.6	36.1	30.0	8.2
Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) *(fcapstone)*	60.0	28.5	9.7	1.8
Participate in a community-based project (service-learning) as part of a course *(fservice)*	29.7	38.9	24.8	6.6

During the current school year, have you or will you participate in the following activities?
Response options: 1=Yes, 0=No

	Yes (%)	No (%)
Working with undergraduates on research *(fdresearch)*	49.6	50.4
Supervising undergraduate internships or other field experiences *(fdintern)*	44.7	55.3

About how many of your undergraduate courses at this institution have included a community-based project (service-learning)? *(fservcourse)*
Response options: 4=All, 3=Most, 2=Some, 1=None

All (%)	Most (%)	Some (%)	None (%)
5.0	11.2	44.1	39.7

Table 3. Significant correlations between High-Impact Practice Items

	fintern	*fleader*	*flearncom*	*fabroad*	*fresearch*	*fcapstone*	*fservice*
fleader	.395**						
flearncom	.327**	.422**					
fabroad	.186**	.323**	.246**				
fresearch	.178**	.280**	.246**	.364**			
fcapstone	.232**	.211**	.238**	.191**	.321**		
fservice	.396**	.359**	.413**	.276**	.247**	.299**	
fservcourse	.212**	.180**	.190**	.097**	.053**	.094**	.330**

Note: *$p < .05$, **$p < .01$

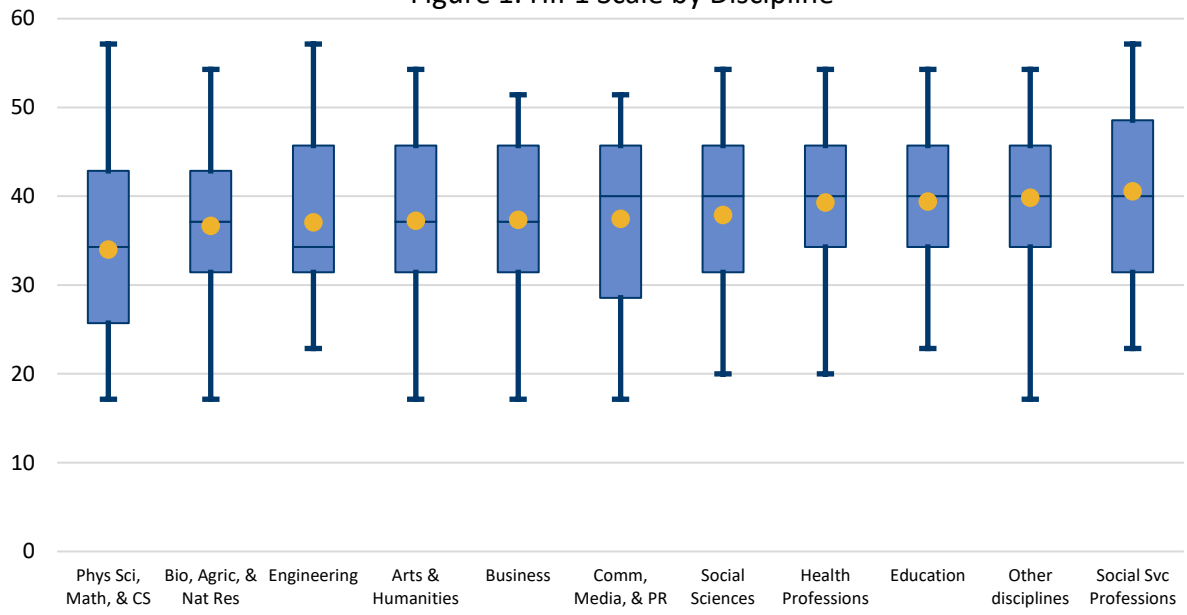
Table 4. High Impact Practice Scale Descriptives

Scale	Count	Minimum	Maximum	Mean	Std. Dev.	Cronbach's Alpha	ICC
HIP1	15990	0	60	35.92	11.218	.743	.062

Table 5. Significant ($p < .01$) Correlations between High Impact Practice Scale and FSSE Scales

	HIP1
Higher-Order Learning	.244
Reflective & Integrative Learning	.378
Learning Strategies	.223
Quantitative Reasoning	.190
Collaborative Learning	.232
Discussions with Diverse Others	.130
Student-Faculty Interaction	.288
Effective Teaching Practices	.220
Quality of Interactions	.159
Supportive Environment	.509

Figure 1. HIP1 Scale by Discipline



Note: Shaded boxes represent the interquartile range: 2nd quartile (25th percentile) and 3rd quartile (75th percentile). Lower error bar represents the 5th percentile. Upper error bar represents the 95th percentile. The dots represent the mean.

Table 6. Faculty Characteristic Predictors for High-Impact Practice Scale

		HIP1		
		Unstd. B	SE	Sig.
(Constant)		.681	.261	**
Age in years		.024	.038	
Gender identity	Man	-.056	.169	
	Woman	.011	.169	
	Another gender identity	.157	.479	
	I prefer not to respond	-.112	.208	
US citizen		-.407	.180	*
Racial/ethnic identification	American Indian or Alaska Native	-.032	.235	
	Asian	-.224	.124	
	Black or African American	.097	.115	
	Hispanic or Latino	.034	.175	
	Middle Eastern or North African	.654	.266	*
	White	-.496	.072	***
	Other	.126	.236	
	Multiracial	.036	.159	
	I prefer not to respond	-.195	.124	
Sexual orientation	Straight (heterosexual)	.014	.101	
	Bisexual	-.261	.205	
	Gay	-.133	.185	
	Lesbian	.080	.220	
	Queer	.380	.264	
	Questioning or unsure	.088	.393	
	Another sexual orientation	.014	.101	
	I prefer not to respond	-.168	.141	
Holds a terminal degree		.118	.083	

Notes: *$p < .05$, **$p < .01$, ***$p < .001$. All continuous variables were standardized before entry in the model so that unstandardized coefficients can be interpreted similar to effect sizes. Effect coding was used so that coefficients can be interpreted as compared to the average faculty member as opposed to a selected reference group.

Table 7. Employment and Institution Characteristic Predictors for High-Impact Practice Scale

		HIP1		
		Unstd. B	SE	Sig.
Disciplinary area	Arts & Humanities	-.042	.064	
	Bio Sciences, Agriculture, & Natural Resources	-.174	.101	
	Physical Sciences, Math, & Computer Sciences	-.411	.090	***
	Social Sciences	-.037	.078	
	Business	-.015	.097	
	Communications, Media, & Public Relations	-.018	.154	
	Education	.172	.086	*
	Engineering	-.131	.135	
	Health Professions	.215	.084	*
	Social Service Professions	.236	.133	
	Other disciplinary fields	.206	.107	
Academic rank	Professor	-.031	.083	
	Associate Professor	.189	.074	*
	Assistant Professor	.017	.093	
	Instructor	-.077	.085	
	Lecturer	-.125	.101	
	Other rank	.028	.108	
Tenure status	No tenure system	.032	.084	
	Not on tenure track	-.022	.071	
	Tenure track	.014	.088	
	Tenured	-.024	.074	
Number of courses taught this school year		-.050	.031	
Years of teaching experience		-.007	.040	
Private institution		.094	.098	
Undergraduate enrollment in thousands		-.055	.075	
Carnegie basic classification	Doctoral U-highest research activity	n/a	n/a	
	Doctoral U-higher research activity	-.030	.155	
	Doctoral U-moderate research activity	-.056	.093	
	Master's C&U-larger programs	.000	.103	
	Master's C&U-medium programs	-.023	.115	
	Master's C&U-smaller programs	.391	.500	
	Baccalaureate-arts & sciences	-.003	.124	
	Baccalaureate-diverse fields	-.040	.119	
	Other Carnegie classification	-.183	.196	

Notes: *$p < .05$, **$p < .01$, ***$p < .001$. All continuous variables were standardized before entry in the model so that unstandardized coefficients can be interpreted similar to effect sizes. Effect coding was used so that coefficients can be interpreted as compared to the average faculty member as opposed to a selected reference group.

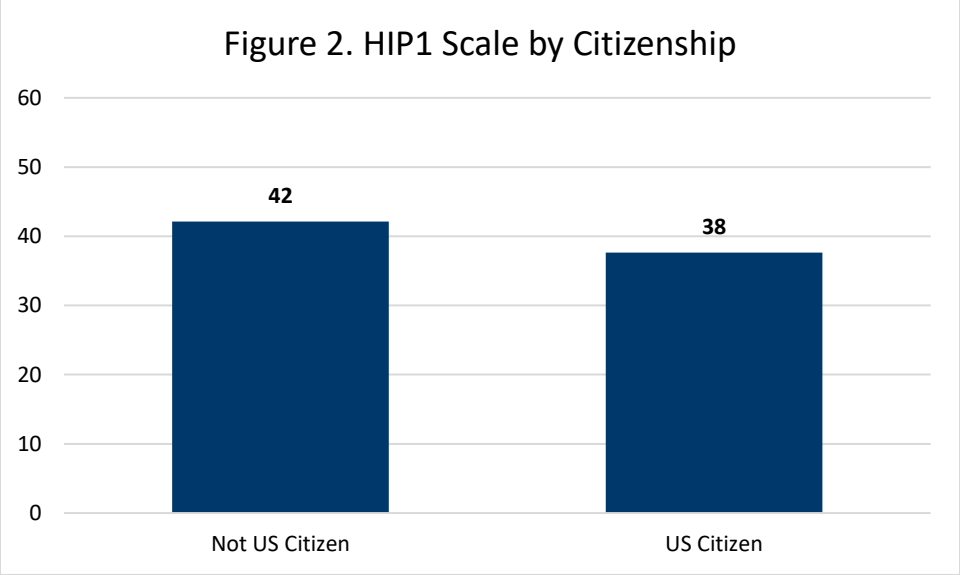


Figure 2. HIP1 Scale by Citizenship
60
50
40
30
20
10
0
42
38
Not US Citizen
US Citizen

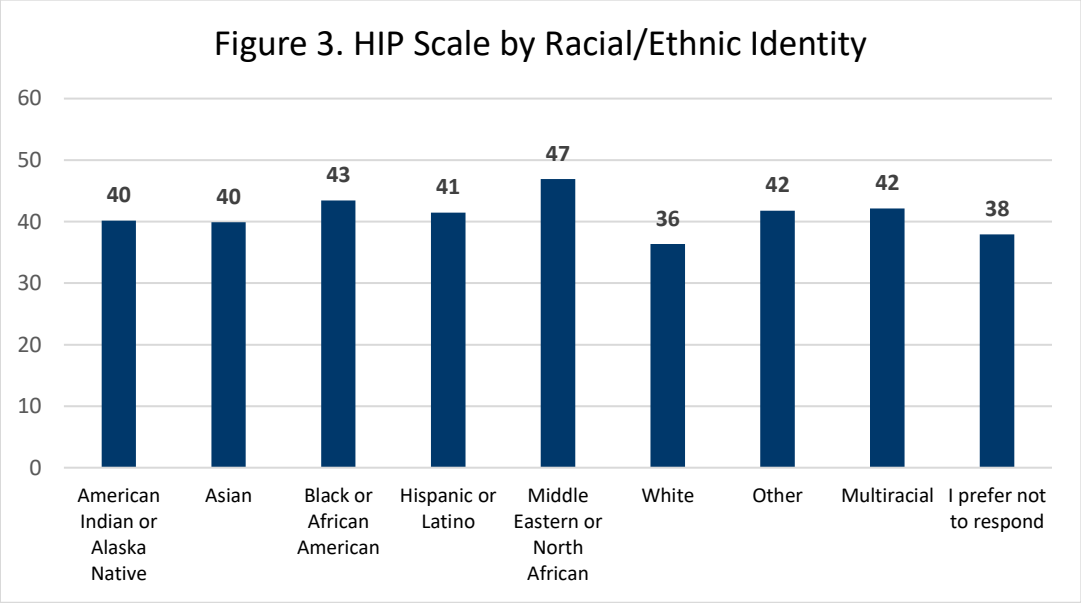


Figure 3. HIP Scale by Racial/Ethnic Identity
60
50
40
30
20
10
0
40
40
43
41
47
36
42
42
38
American Indian or Alaska Native
Asian
Black or African American
Hispanic or Latino
Middle Eastern or North African
White
Other
Multiracial
I prefer not to respond

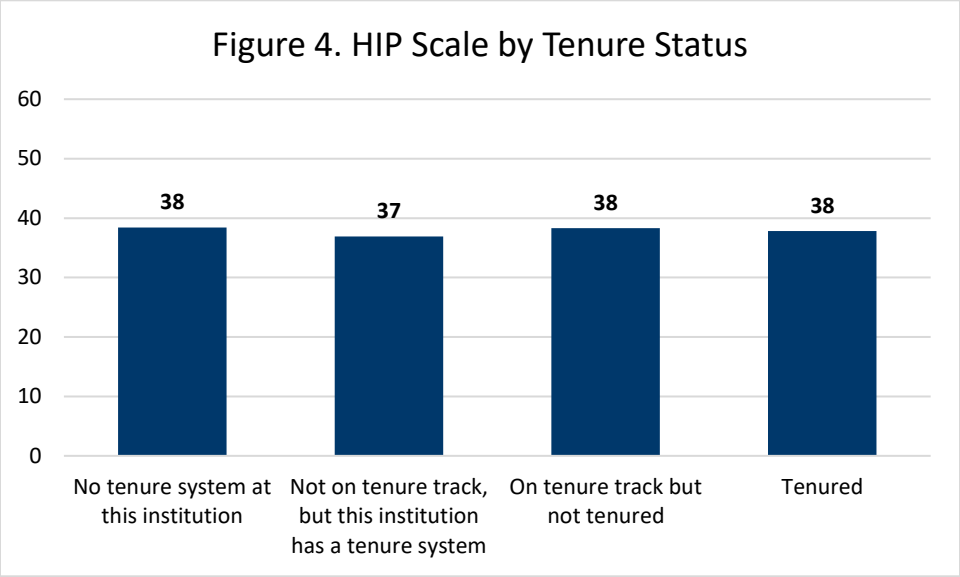


Figure 4. HIP Scale by Tenure Status
60
50
40
30
20
10
0
38
37
38
38
No tenure system at this institution
Not on tenure track, but this institution has a tenure system
On tenure track but not tenured
Tenured

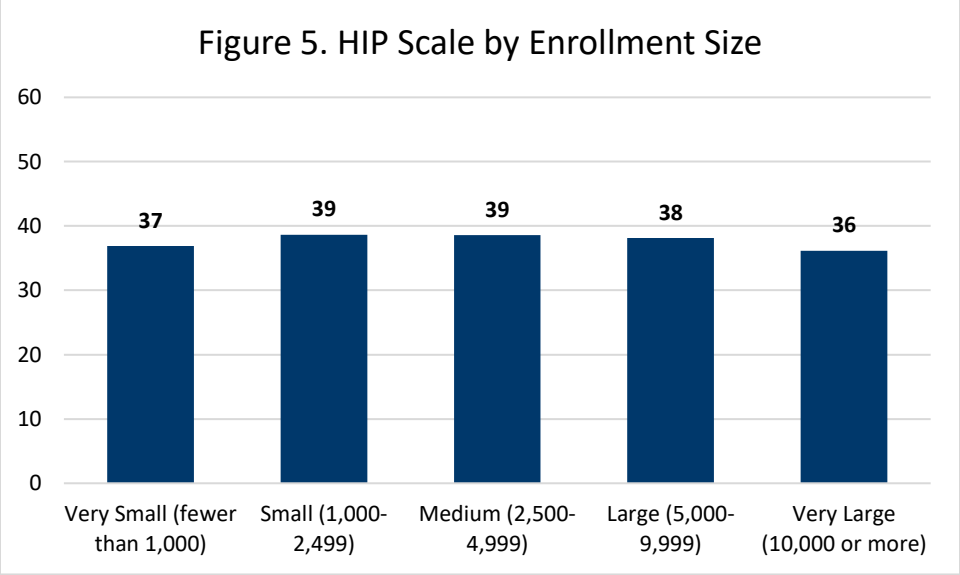


Figure 5. HIP Scale by Enrollment Size
60
50
40
30
20
10
0
37
39
39
38
36
Very Small (fewer than 1,000)
Small (1,000-2,499)
Medium (2,500-4,999)
Large (5,000-9,999)
Very Large (10,000 or more)

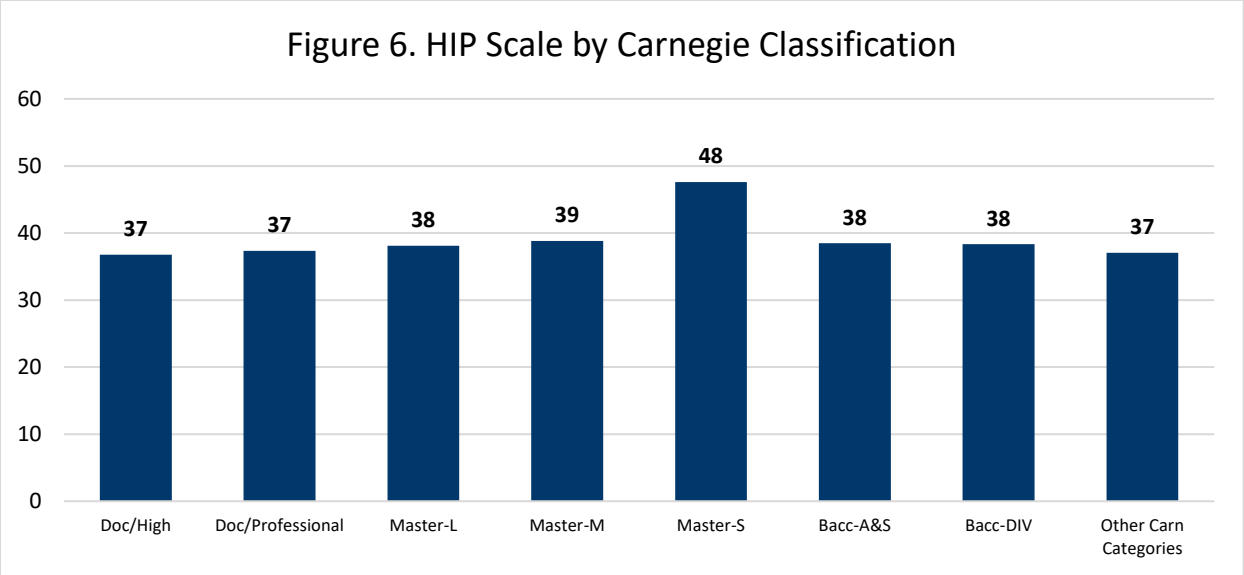


Figure 6. HIP Scale by Carnegie Classification
60
50
40
30
20
10
0
37
37
38
39
48
38
38
37
Doc/High
Doc/Professional
Master-L
Master-M
Master-S
Bacc-A&S
Bacc-DIV
Other Carn Categories